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EXAMINER

TORRES, MARCOS L

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/516,926	<b>Applicant(s)</b> BAUSSI ET AL.	
	<b>Examiner</b> MARCOS L. TORRES	<b>Art Unit</b> 2617	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 April 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11, 13-17, 20-23, 25-42 and 48-62 is/are pending in the application.
- 4a) Of the above claim(s) 61 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11, 13-17, 20-23, 25-42, 48-60 and 62 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 61 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2-08-08 has been entered.

### ***Response to Arguments***

2. Applicant's arguments filed 2-08-08, with respect to claim 1 have been fully considered but they are not persuasive.

3. Regarding applicant argument that permitting voice communication between the devices to incorporate the Katsuno modification to the Desch system; Desch discloses in the background of the invention that the invention is related to field of child monitoring and is a common and well known technique and desirable to listen to the child to verify if the child is distressed (see col. 1, line 13-29).

4. As to applicant arguments that there is no need to exchange data between the child's unit and parent unit, because it would be more sensible to advance all the data via cell phone telephony; it is noted that in the embodiment disclosed by Katsuno in col. 19, line 45 - col. 21, line 30; col. 3, lines 24-37 the location information is sent directly between the mobile stations using the second communication system, in the first embodiment he uses the first cellular communication system. Therefore, a combination

of Desch with Katsuno would bring a mobile device that will work as described in Desch with the change that will also permit to have a cell phone capability; this would be desirable specially in a distress situation which a 911 call could be made if for example a child is abducted (see Desch col. 1, lines 35-40).

5. Also, applicant arguments that the examiner does not provide any motivation for modifying Desch to exchange the data over non-telephony channel responsive to the display; it is noted in the claim that the display is responsive to the location of the first unit, so the exchange of data is really responsive to the location of the first unit and this limitation is taught by Desch in col. 4, line 5 – col. 5, lines 20.

6. With regards to the arguments directed to claim 36 and the limitation “relative to the orientation of the second unit”; it is noted that the claim does not further explain the relation in size or degree or other measurable characteristics with the orientation of the second device, in Takachikawa the location of the icon is relative to the orientation and distance of the second unit since the second unit is centered in the display (see fig. 4, col. 8, line 50 – col. 9, line 17; col. 11, lines 15-20). And finally, it is noted that the display map of the present application according to fig.1 is the same frontal half of the Tachikawa map of fig. 4, thereby having the same result.

7. Also applicant argument that the Tachikawa map is less convenient than the arrows of Desch; the Tachikawa map is more convenient since it permit to find the direction and position of the child and also show the **relative** distance (see fig. 4, col. 8, line 50 – col. 9, line 17; col. 11, lines 15-20), in addition the Tachikawa map would be even more convenient since it permit to display the location of more than unit (see in

Desch col. 6, lines 4-11). Therefore, it would be obvious to one of the ordinary skills in the art at the time of the invention to use Tachikawa map for enhanced convenience.

8. As to applicant's arguments to claims 40-42, directed to the working range of the device, it is noted that setting a working range for a device is not an inventive step since the working range of a device have to be set by the FCC regulations and it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

9. Also to the applicant argument that adjusting the transmitter power level in conformance with the FCC statues is nothing like having an effective maximum range less than or equal to an x amount; it is obvious to one of the ordinary skill in the art that transmitted power level is directly proportional to effective maximum range and is set according to regulations such as the FCC. In addition, setting a specified maximum range is a design choice since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

10. The previous rejection in record stands.

#### ***Election/Restrictions***

11. Newly submitted claim 61 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: the newly presented claim is directed to a method of establishing communication with a stranger (matchmaking), while the previous claim were directed to a direction finding system.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 61 withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

***Claim Rejections - 35 USC § 112***

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

13. Claim 57 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

14. Claim 57 recites the limitation "said controller" in line 1. There is insufficient antecedent basis for this limitation in the claim since its base claim 52 does not disclose a controller.

***Claim Rejections - 35 USC § 102***

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

16. Claim 62 is rejected under 35 U.S.C. 102(b) as being anticipated by Desch 6078260.

17. As to claim 62, Desch discloses direction finding system comprising: at least one first hand holdable unit [101] comprising circuitry that transmits a radio beacon signal

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(see fig. 1, col. 3, lines 26-32); and at least one second hand holdable unit [201] having a display screen [202] and comprising circuitry that receives a radio beacon (RB) signal transmitted by a given first unit of the at least one first unit and configured to generate a display responsive to the RB signal transmitted by the given first unit, such that an operator of the second unit can match the display on the display screen with objects [child] in his field of view (see col.2, lines 26-61; col. 4, lines 6-11; col. 5, lines 5-20).

***Claim Rejections - 35 USC § 103***

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

20. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

21. Claim 1, 20-23, 25-26, 39, 48 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Desch US006078260A in view of Katsuno US007085577B1.

As to claim 1, Desch discloses a direction finding system comprising: at least one first handheld unit comprising non-telephony circuitry that transmits a radio beacon signal (see abstract; fig. 1, item 101); and at least one second handheld unit (see abstract; fig. 2, item 201) having a display screen (see fig. 2, item 202) and comprising direction finding (DF) circuitry that receives a radio beacon (RB) signal transmitted by a given first unit of the at least one first unit and determines from the received radio beacon signal an azimuth angle for the location of the first unit (see col. 4, lines 6-10); wherein the controller generates a display on the display screen responsive to the azimuth angle that indicates a location of the given first unit, and wherein the at least one first and at least one second unit comprise non telephony circuitry that enable the first and second unit to exchange data over a non-telephony channel responsive to the display generated by the controller (see col. 4, line 5 – col. 5, lines 20). Desch does not specifically disclose circuitry and apparatus that provides conventional cell phone telephony and data that enables communication with the given first unit via conventional cell phone technology. In an analogous art, Katsuno discloses circuitry and apparatus that provides conventional cell phone telephony and data that enables communication with the given first unit via conventional cell phone technology (see col. 10, lines 3-13).



Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to add cell phone technology for the simple purpose of permitting voice communication between the devices. Thereby, increasing user satisfaction by providing new features.

As to claim 20, Desch discloses a direction finding system wherein the direction finding circuitry determines a range for the first unit of the at least one unit responsive to the received RB signal (see col. 4, lines 24-31).

As to claim 21, Desch discloses a direction finding system according to claim 20 wherein the direction finding circuitry determines a DC level of the RB signal (see col. 4, lines 6-11).

As to claim 22, Desch discloses a direction finding system according to claim 21 wherein the controller determines the range responsive to magnitude of the DC level (see col. 4, lines 6-11).

As to claim 23, Desch discloses a direction finding system wherein the controller generates the display responsive to the determined range (see col. 4, lines 44-49).

As to claims 25, Desch discloses a direction finding system wherein a second unit of the at least one second unit transmits an interrogation signal non-telephony channel responsive to which a first unit of the at least one first unit that receives the interrogation signal transmits an RB signal (see col. 4, lines 11-22).

As to claim 26, Desch discloses a direction finding system wherein subsequent to transmitting the interrogation signal the second unit transmits at least one additional interrogation signal over the non-telephony channel (see col. 4, lines 11-22).

As to claim 39, Desch discloses a direction finding system wherein the RB signals comprise a carrier wave having a frequency in a range from 800 MHz to 900 MHz (see col. 3, lines 34-35).

As to claim 48, Desch does not disclose cell phone circuitry. Katsuno discloses wherein the conventional cell phones circuitry and the DF (GPS) circuitry share an antenna (see fig. 9, items 228,230)

As to claim 51, Desch wherein said display automatically changes responsive to change in said location (see col. 5, lines 5-20). Katsuno discloses wherein said display automatically changes responsive to change in said location (see col. 5, lines 5-20).

22. Claims 2-3, 9-11, 13, 15, 17 and 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Desch in view of Katsuno and further in view of Donath 4754281.

As to claim 2, Desch discloses everything as explained above (see claim 1) except for a direction finding system wherein the direction finding circuitry comprises Watson-Watts direction finding circuitry. In an analogous art, Donath discloses a direction finding system wherein the direction finding circuitry comprises Watson-Watts direction finding circuitry (see col. 1, lines 5-6). Thereby, it would have been obvious to one of the ordinary skill in the art at the time of the invention to combine these teachings to enhance the quality of the direction.

As to claim 3, Desch discloses a direction finding system wherein for receiving RB signals the at least one second unit comprises a first antenna and a second antenna electrically connected to the Watson-Watts direction circuitry (see col. 1, lines 6-13).

As to claims 9-10, Desch and Katsuno does not disclose Donath teachings.

Donath discloses a direction finding system wherein the two antennas are spaced apart by a distance less than one fifth or one eighth of the carrier wavelength (see col. 3, lines 51-57). Thereby, it would have been obvious to one of the ordinary skill in the art at the time of the invention to combine these teachings to enhance the quality of the direction.

As to claim 11, Desch and Katsuno does not disclose Donath teachings. Donath discloses a direction finding system wherein the Watson-Watts circuitry determines the azimuth from a difference between amplitude or phase of the received RB signal at the antennae (see col. 2, lines 7-19). Thereby, it would have been obvious to one of the ordinary skill in the art at the time of the invention to combine these teachings to enhance the quality of the direction.

As to claims 40-42, Desch discloses a direction finding system wherein a second unit of the at least one second unit has an effective maximum range less than or equal to 50, 100 or 200 meters for receiving an RB signal transmitted by a first unit that can be used to determine an azimuth for the first unit (see col. 4, lines 24-27). Also, one of the ordinary skill in the art at the time of invention will know that the working range of device is directly proportional to the transmitting power level and will adjust the transmitting power level in conformance with the FCC statues. And setting a predetermined maximum range is not an inventive step it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

As to claims 13 and 15, Desch not disclose Katsuno teachings. Katsuno discloses a direction finding system wherein the at least one first or second unit comprises a common antenna for transmitting RB signals and for cell phone telephony functions (see fig. 9).

As to claim 17, Desch, Donath and Katsuno disclose everything as explained above except for a direction finding system wherein at least one first unit and the at least one second unit comprise a filter that blocks electromagnetic energy at a frequency of the carrier wave from reaching the cell phone circuitry. However, OFFICIAL NOTICE IS TAKEN THAT the use of filter to minimize interference is a common and well-known technique. Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to combine these teachings to minimize interference.

23. Claims 4-8 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Desch in view of Katsuno and Donath as applied to claim 3 above, and further in view of Jelloul US005237336A.

As to claims 4-6, Desch, Katsuno and Donath disclose everything as explained above (see claim 3) except for a direction finding system wherein a difference in signal attenuation between the electrical connections of the antennae to the Watson-Watts circuitry is less than 0.3 dB. In an analogous art, Jelloul discloses a direction finding system wherein a difference in signal attenuation between the electrical connections of the antennae to the Watson-Watts circuitry is less than 0.3 dB (see col. 5, lines 46-48).

Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to combine these teachings to enhance the quality of the reading.

As to claims 7-8, Desch, Katsuno and Donath disclose everything as explained above except for Jelloul teachings. Jelloul discloses a direction finding system wherein the antenna have an electrical length less than one fifth the wavelength of a carrier wave of the radio beacon signal (see col. 3, lines 43-45). Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to combine these teachings to enhance the quality of the reading.

As to claim 49, Desch and Donath disclose everything as explained above except for sharing an antenna. Katsuno discloses wherein the conventional cell phones circuitry and the DF (GPS) circuitry comprised in the at least on second unit share an antenna (see fig. 9, items 228,230 Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to combine these teachings for the simple purpose of portability..

24. Claims 52-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Desch in view of Tachikawa US007039427B2.

As to claim 52 and 57, Desch discloses a direction finding system comprising: at least one first handheld unit comprising at least one first hand holdable unit comprising circuitry that transmit a radio beacon signal (see abstract; fig. 1, item 101); and at least one second handheld unit (see abstract; fig. 2, item 201) having a display screen (see fig. 2, item 202) and comprising direction finding (DF) circuitry that receives a radio beacon (RB) signal transmitted by a given first unit of the at least one first unit and

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determines from the received radio beacon signal an azimuth angle for the location of the first unit (see col. 4 ,lines 6-10). Desch does not specifically disclose the system being configured to generate an icon on the display screen, in a place responsive to the azimuth angle of the given first unit in relation to the orientation of the second unit. In an analogous art, Tachikawa discloses the system being configured to generate an icon on the display screen, in a place responsive to the azimuth angle of the given first unit in relation to the orientation of the second unit (see fig. 4-9; col. 8, line 50 – col. 9, line 17; col. 11, lines 15-20). Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to combine these teachings to make easy to find one or more units.

As to claim 53, Desch discloses a direction finding system wherein the arrows place change responsive to the rotation of the second unit (see col. 5, lines 5-20). And Tachikawa discloses the system being configured to generate an icon on the display screen and change responsive to the rotation of the second unit (see fig. 4-9; col. 8, line 50 – col. 9, line 17; col. 11, lines 15-20). Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to combine these teachings to make easy to find one or more units.

As to claims 54-56, Desch discloses a direction finding system wherein a second unit of the at least one second unit has an effective maximum range less than or equal to 50, 100 or 200 meters for receiving an RB signal transmitted by a first unit that can be used to determine an azimuth for the first unit (see col. 4, lines 24-27). Also, one of the ordinary skill in the art at the time of invention will know that the working range of device

is directly proportional to the transmitting power level and will adjust the transmitting power level in conformance with the FCC statutes. And setting a predetermined maximum range is not an inventive step it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

As to claim 58, Desch discloses a direction finding system configured to receive RB signals from two or more first units and allow a user to select one of said two or more units (see col. 6, lines 3-11).

As to claim 59, Desch does not specifically disclose selecting from the display screen. However, OFFICIAL NOTICE IS TAKEN THAT the use of devices with touch screens are a common and well-known technique. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to use a touch screen for input for the simple purpose of an easy user input interface.

As to claim 60, Desch discloses a direction finding system configured to exchange data only with a selected unit (see col. 3, lines 3-20).

25. Claims 33-38 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Desch in view of Katsuno and further in view of Tachikawa.

As to claim 36, Desch discloses a direction finding system wherein the display indicating a position of a first unit. Desch and Katsuno do not teach the limitations taught by Tachikawa. In an analogous art, Tachikawa discloses using an icon representing the first unit displayed against a background of a radar screen and wherein a location of the icon on the radar screen corresponds to a location of the first unit

relative to the orientation of the second unit (see fig. 4-9; col. 8, line 50 – col. 9, line 17; col. 11, lines 15-20). Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to combine these teachings to make easy to find one or more units.

As to claim 37, Desch and Katsuno do not teach the limitations taught by Tachikawa. Tachikawa discloses a direction finding system wherein a first unit of the at least one first unit is programmable so that RB signals that it transmits comprises data encoding at least one visual cue characteristic of the user of the first unit (see fig. 4-9). Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to combine these teachings to make easy to find one or more units.

As to claim 38, Desch and Katsuno do not teach the limitations taught by Tachikawa. Tachikawa discloses a direction finding system wherein the controller of the at least one second unit displays on the screen, in association with an icon representing a first unit, a visual cue of the at least one visual cue encoded in an RB signal it receives from the first unit (see fig. 4-9). Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to combine these teachings to make easy to find one or more units.

As to claim 33, Desch and Katsuno do not teach the limitations taught by Tachikawa. Tachikawa discloses a direction finding system wherein each first unit is programmable so that RB signals transmitted by the first unit comprises ID data specific to a user of the first unit (see fig. 4-9, col. 15, lines 4-7; col. 11, lines 28-36). Therefore,



it would have been obvious to one of the ordinary skill in the art at the time of the invention to combine these teachings to make easy to find one or more units.

As to claim 34, Desch and Katsuno do not teach the limitations taught by Tachikawa. Tachikawa discloses a direction finding system wherein each unit of the at least one second unit is controllable by its user to transmit a signal comprising ID data that it receives in an RB signal from a given first unit whose location is indicated in the display, which given first unit is selectable by the user from the display (see fig. 4-9, col. 15, lines 4-7; col. 11, lines 28-36). Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to combine these teachings to make easy to find one or more units.

As to claim 35, Desch and Katsuno do not teach the limitations taught by Tachikawa. Tachikawa discloses a direction finding system according to claim 34 wherein the second unit is programmable with preference data specific to the second unit's user and wherein the location of a first unit is indicated on the screen only if ID data in the RB signal received from the first unit matches preference data with which it is programmed (see col. 11, lines 28-36). Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to combine these teachings to make easy to find one or more units.

As to claims 50, Tachikawa discloses wherein said location is displayed on the display screen in relation to the orientation of the second unit (see fig. 4, col. 8, line 50 – col. 9, line 17; col. 11, lines 15-20). Therefore, it would have been obvious to one of the

ordinary skill in the art at the time of the invention to combine these teachings to make easy to find one or more units.

26. Claims 27-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Desch in view of Katsuno and further in view of Brodie US006301545B1.

As to claim 31, Desch discloses a direction finding system (see abstract). Katsuno discloses wherein the at least one first unit comprises at least two first unit (see fig. 1, items 32). Desch and Katsuno do not specifically disclose wherein the predetermined delay period for each first unit is chosen from plurality of different delay periods so as to reduce a probability that any two of the first units that receive a same interrogation signal have a same delay period. In an analogous art, Brodie discloses wherein the predetermined delay period for each first unit is chosen from plurality of different delay periods so as to reduce a probability that any two of the first units that receive a same interrogation signal have a same delay period (see col. 5, lines 25-34). Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to combine these teachings for avoiding transmission collision between the transmitters.

As to claim 32, Desch and Katsuno do not teach the limitations taught by Brodie. Brodie discloses a direction finding system wherein the transmitting circuitry of the first unit dithers it's predetermined delay period (see col. 5, lines 25-34). Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to combine these teachings for avoiding transmission collision between the transmitters.

As to claim 30, Desch and Katsuno do not teach the limitations taught by Brodie. Donath discloses a direction finding system wherein the transmitting circuitry of each first unit transmits its RB signal following a receipt of an interrogation signal (see col. 4, lines 15-23). Since the claim does not specify the value of the predetermined delay period, for examining purposes the delay period is zero.

As to claim 27, Desch and Katsuno do not teach the limitations taught by Brodie. Brodie discloses a direction finding system wherein each of the at least one additional interrogation signal is transmitted following a delay period that begins after a last RB signal received by the second unit that is transmitted by the at least one first unit responsive to the preceding interrogation signal (see col. 5, lines 25-34).

As to claim 28, Desch and Katsuno do not teach the limitations taught by Brodie. Brodie discloses a direction finding system wherein each interrogation signal transmitted by the second unit comprises ID data specific to a user of the second unit (see col. 5, lines 25-34). Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to combine these teachings for the simple purpose of reaching the correct unit.

As to claim 29, Desch and Katsuno do not teach the limitations taught by Brodie. Brodie discloses a direction finding system wherein each of the at least one first unit is programmable with preference data specific to a user of the first unit and if it receives an interrogation signal transmitted by the second unit it transmits an RB signal responsive thereto only if the ID data in the transmitted interrogation signal matches preference data with which it is programmed (see col. 5, lines 25-34). Therefore, it

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would have been obvious to one of the ordinary skill in the art at the time of the invention to combine these teachings for the simple purpose of reaching the correct unit.

27. Claims 14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Desch in view of Katsuno and further in view of Donath as applied to claims 13 and 15 above, and further in view of Brodie.

As to claims 14 and 16, Desch, Donath and Katsuno disclose everything as explained above (see claims 13 and 15) except for a direction finding system wherein the at least one first unit comprises a switch controllable to selectably, electrically connect the common antenna to the radio beacon circuitry or the cell phone circuitry. In an analogous art, Brodie discloses a direction finding system wherein the at least one first unit comprises a switch controllable to selectably, electrically connect the common antenna to the radio beacon circuitry or the cell phone circuitry (see fig. 2, item 42). Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to combine these teachings for the simple purpose of portability.

### ***Conclusion***

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/George Eng/  
Supervisory Patent Examiner, Art Unit 2617  
/mlt/

